EXHIBIT I

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September 27, 2024

Peter Tong
Russ, August & Kabat
4925 Greenville Ave., Suite 200
Dallas, TX 75206

Re: *VirtaMove, Corp. v. Google*, Case No. 2:24-cv-00033-DC-DTG

Dear Mr. Tong:

We write regarding deficiencies in VirtaMove's Supplemental Preliminary Disclosure of Asserted Claims and Infringement Contentions (the "Supplemental Infringement Contentions"). The Supplemental Infringement Contentions still do not comply with the requirements of Midland OGP § I, as discussed in detail below, and in many cases exacerbate the problems we identified in VirtaMove's Corrected Infringement Contentions. We look forward to VirtaMove's prompt resolution of these issues.

ACCUSED PRODUCTS/INSTRUMENTALITIES

As we informed you in our July 22, 2024 letter, OGP § I requires that VirtaMove provide a "chart setting forth where in the accused product(s) each element of the asserted claim(s) are found." OGP § I. Because Google Kubernetes Engine, Cloud Run, and Migrate to Containers are separate products, VirtaMove needed to provide contentions for each of them separately, on an element-by-element basis. 7/22/2024 Letter at 1. Rather than addressing this error, VirtaMove's Supplemental Infringement Contentions seemingly compound it by purporting to accuse Google Cloud Observability of infringing '814 claim 13 when used with either GKE or Cloud Run. '814 Chart at 1. But as VirtaMove does not even attempt to show how Google Cloud Observability purportedly infringes claim 1, from which claim 13 depends, it is accordingly further flouting the Court's Scheduling Order that it provide a "chart setting forth where in [Google Cloud Observability] each element of the asserted claim(s) are found." Nor has VirtaMove purported to explain why adding additional accused products at this juncture is appropriate, or why VirtaMove could not have raised Google Cloud Observability by the Court's deadline.

As we previously informed VirtaMove and in contrast to GKE and Cloud Run, Migrate to Containers is a migration tool to put applications into containers. 7/22/2024 Letter at 1.

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VirtaMove's allegations continue to contain barely any discussion as to how Migrate to Containers purportedly infringes any of the asserted claims. Instead, VirtaMove's Supplemental Infringement Contentions merely assert that "Migrate to Containers is used to produce a container that is run on Google Kubernetes Engine or Cloud Run." '814 Chart at 1, 8. But this does not indicate how Migrate to Containers *itself* purportedly infringes the asserted claims. Please confirm that VirtaMove has no theory of infringement as to how Migrate to Containers *itself* infringes the asserted claims, or promptly supplement VirtaMove's Infringement Contentions to provide the missing allegations. As we previously informed VirtaMove, these deficiencies in the Infringement Contentions preclude Google from understanding VirtaMove's contentions in this matter, which is particularly prejudicial in view of Google's now-passed deadlines and/or future deadlines for invalidity contentions and claim construction, and further deadlines in the case.

We also previously informed VirtaMove that the list of accused instrumentalities in VirtaMove's disclosures is improperly open-ended and defined by catch-alls. 7/22/2024 Letter at 2. Yet VirtaMove's Supplemental Infringement Contentions continue to assert that the Accused Instrumentalities include (a) "***Google products and services using secure containerized applications***, ***including without limitation*** Google Kubernetes Engine, Cloud Run, and Migrate to Containers, and all versions and variations thereof since the issuance of the '814 patent"; and (b) "***Google products and services using user mode critical system elements as shared libraries, including without limitation*** Google Kubernetes Engine, Cloud Run, and Migrate to Containers, and all versions and variations thereof since the issuance of the '058 patent" ("Accused Instrumentalities"). Supplemental Infringement Contentions, p. 2.

DOE

As we previously informed VirtaMove, its doctrine of equivalents contentions consist entirely of a single boilerplate statement: "to the extent any claim limitation is not met literally, it is nonetheless met under the doctrine of equivalents because the differences between the claim limitation and each Accused Instrumentality would be insubstantial, and each Accused Instrumentality performs substantially the same function, in substantially the same way, to achieve the same result as the claimed invention." 7/22/2024 Letter at 2. Here too, VirtaMove's Supplemental Infringement Contentions do not even attempt to address this deficiency ('814 Chart at 1; '058 Chart at 1).

'814 PATENT

VirtaMove's Supplemental Infringement Contentions for the '814 Patent continue to remain deficient as they fail to put Google on notice as to what specific functionality is accused of meeting each element of each asserted claim. VirtaMove has ignored the numerous problems identified in Google's 7/22/2024 Letter on pages 3-6. So these issues remain.

A non-exhaustive list of the issues raised by the edits to VirtaMove's '814 Infringement Chart follows, to the extent they were not discussed above.

On page 2, VirtaMove added the sentence "The servers operate in disparate computing environments, including because each server is a stand-alone computer and/or each server is

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unrelated to the other servers due to having independent hardware and, in some instances, independent software." This edit is presumably an effort to address VirtaMove's failure to identify the "disparate computing environments" required by the claim. *See* 7/22/2024 Letter at 3. But this revision still does not actually identify what the disparate computer environments are. Is each separate physical server used by each of GKE, Cloud Run, and Migrate to Containers a disparate computing environment? Further, the preamble of claim 1 recites other claim elements on which VirtaMove's Supplemental Infringement Contentions are deficient, including "servers with operating systems that differ," "secure, executable, applications related to a service," and "applications each include an object executable by at least some of the different operating systems for performing a task related to the service." *Id*. at 3, 4. VirtaMove does not even attempt to address Google's concerns regarding these points.

On page 8, VirtaMove edited the (now) fourth sentence of the second paragraph to read "In addition to the application software, each container includes associated system files, including a Linux user space required to execute the application, for example libc/glibc and other shared libraries, configuration files, etc." Is VirtaMove saying that "libc/glibc" are the alleged "associated local system files"? 7/22/2024 Letter at 3-4. Even if that is so, it seems that VirtaMove is suggesting that there may be other unidentified associated local system files. Please clarify. We further note that VirtaMove has not addressed its failure to indicate what server these files "remain resident on." *Id*.

VirtaMove also edited the first sentence of the third paragraph of page 8 to read "For another example, GKE and Cloud Run each stores files, pertaining to the applications, in ephemeral or persistent volumes or in the filesystem represented in the container image, required to execute the applications within those containers." It is unclear what additional specificity the addition of "or in the filesystem represented in the container image" is intended to convey. In any event, VirtaMove's edit fails to address which "files" are being stored or even whether those stored "files" are the "associated system files" recited in the prior paragraph. Nor does VirtaMove's edit address which server VirtaMove alleges performs the storage.

VirtaMove further added a new fourth paragraph to page 8, which reads "The containers are secure containers as claimed. For example, the data within an individual container is insulated from the effects of other containers except to the extent the container is specifically configured to allow other containers to modify its data, for example using a shared volume." As we pointed out in our previous letter, "[t]he '814 patent provides [] a definition of 'secure application container' at 2:52-54." 7/22/2024 Letter at 3. The specification defines "secure application container" as "An environment where each application set appears to have individual control of some critical system resources and/or where data within each application set is insulated from effects of other application sets is referred to as a secure application container." '814 patent at 2:52-54. VirtaMove's contention does not align with either criteria for a "secure application container" Please confirm that this is nevertheless VirtaMove's theory.

On page 24, VirtaMove edited its infringement chart to assert that "the method" is practiced by Google <u>and/or its customer</u> through the Accused Instrumentalities." VirtaMove made similar edits to pages 35 and 40 of its '814 chart, thereby consistently accusing "Google and/or its customer" of meeting the various claim elements. But as before (*c.f.* 7/22/2024 Letter at 6), it

remains unclear whether VirtaMove is alleging that Google, Google's customer, or the combination of Google and its customer perform each of the limitations. It is further unclear whether VirtaMove contends that different limitations are performed by different entities, e.g. that Google performs steps 1[a] and 1[b], Google's customer performs steps 1[c] and 1[d], Google or its customer perform steps 1[e] and 1[f], and Google and its customer together perform step 1[g]. VirtaMove's contentions accordingly fail to put Google on notice as to which entity or combination of entities is alleged to perform each limitation, the specifics of which are plainly relevant to Google's noninfringement defenses. Please clarify.

On page 28, VirtaMove has added the following two sentences to the end of the second paragraph: "As described above and below, in the Accused Instrumentalities the associated system files provide at least some of the same functionalities as the associated local system files. The host/node's associated local system files remain resident on the host/node, for example for use by system processes or applications outside the container environment." But VirtaMove provides no evidence or citations supporting either of these assertions, thereby failing to put Google on notice as to how VirtaMove contends this limitation is met. Please clarify whether VirtaMove is making these allegations on information and belief. If not, please indicate precisely which "associated system files," "functionalities," and "associated local system files" VirtaMove contends have these characteristics.

'058 Patent

As with its contentions for the '814 patent, VirtaMove's Supplemental Infringement Contentions for the '058 Patent remain infirm for failing to put Google on notice as to what specific functionality is accused of meeting each element of each asserted claim. VirtaMove has similarly mostly ignored the numerous problems identified in Google's 7/22/2024 Letter on pages 6-9. Thus, these issues remain. A non-exhaustive list of the issues raised by the edits to VirtaMove's '058 Infringement Chart follows, to the extent they were not discussed above.

On page 5, VirtaMove has added a new paragraph stating "For example, the OSCSEs include kernel-mode functions similar to the functionalities provided by user-space libraries such as glibc. These are implemented in kernel-space to handle tasks such as (without limitation) memory management (kmalloc(), kfree(), etc,) at kernel level." VirtaMove made a similar edit on page 7. It appears that VirtaMove has now clarified that it contends glibc meets the "OSCSE" limitation. If that is incorrect, let us know. But VirtaMove's contentions remain infirm as they appear to assert other unidentified libraries as OSCSEs. Please clarify whether VirtaMove accuses other libraries of meeting the "OSCSE" limitation, and if so, supplement the '058 chart to specifically identify those additional libraries.

On page 21, VirtaMove added two new sentences to the second paragraph of its allegations as to claim 1[d]: "The base image forms a part of the container image according to the 'layer' model described in the documentation below", and "In turn, when one or more applications executes within the container runtime environment, it dynamically links to the SLCSEs." Google understands VirtaMove's infringement theory to be that when the instance of the container is created, the accused products somehow access a base image. Please confirm Google's understanding is correct, and explain what access VirtaMove is referring to.

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For the reasons stated above, VirtaMove's edits to its Supplemental Infringement Contentions do not meet the requirements of OGP § I. Please promptly confirm that VirtaMove will remedy the identified issues and provide a timeline for doing so in the near future by Wednesday, October 2. If VirtaMove is unwilling to do so, please provide your availability next week to meet and confer about these issues.

Very truly yours,

/s/
David A. Perlson